UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

MEMORANDUM

DATE: MAR 18 1997

SUBJECT: **ENFORCEMENT ACTION MEMORANDUM** - Request for a Non-Time Critical CERCLA Removal Action at the Accra-Pac Site, City of Elkhart, County of Elkhart, Indiana

FROM: Ken Theisen
On-Scene Coordinator

TO: William Muno, Director
Superfund Division

THRU: Richard Karl, Chief Richard Karl
Emergency and Enforcement Response Branch

I. PURPOSE

The purpose of this Action Memorandum is to request and document approval of the proposed Non-Time Critical Removal Action for the Accra-Pac Site, located in Elkhart, Indiana. The Accra-Pac Site, a 220 foot by 400 foot parcel, is the location of a former aerosol spray packaging facility that was destroyed by an explosion and resulting fire in 1976. This action is necessary to abate an imminent and substantial threat to public health and the environment posed by the presence of severely contaminated soils and groundwater. The soils and the groundwater are contaminated with 15 different volatile organic compounds (VOC's) in concentrations that constitute a significant source of continuing contamination to groundwater and, ultimately, to surface water.

The action is expected to result in a substantially reduced amount of VOC contamination in the soils, both surface and sub-surface, and in the groundwater. The Site is in close proximity to the St. Joseph River and a hydrologic investigation has concluded that the plume of contamination is discharging into that waterway. Light industrial businesses are located directly adjacent to the Site and residences are located within one eighth of a mile to the Site.

As a result of the long lead time in developing and implementing a "Scope of Work", and due to the fact that the public health threat from contaminated residential wells has been mitigated in

an earlier Removal Action, this proposed action is being classified as a Non-Time Critical Removal Action.

II. SITE CONDITIONS AND BACKGROUND

CERCLIIS ID# IND942080614

This Site is not on the National Priorities List(NPL).

The explosion and fire which destroyed the Accra-Pac site in 1976 left only the concrete foundation and 13 underground storage tanks (UST), when a Mr. Warner Baker bought the facility in 1977. Mr. Baker was either unaware of or unconcerned with the existence of these tanks and their contents.

During 1985, a separate emergency removal action, consisting of a water main extension project, was conducted in the area due to the presence of VOC contamination in residential wells. This action involved the extension of municipal water to the affected homes. The existence and site history of the Accra-Pac Site was not known to the U.S. EPA at the time of this removal action. While this project was on-going, the Elkhart County Health Department made the existence of the Accra-Pac Site known to the On-Scene Coordinator in charge of the alternate water supply project, and the underground tanks were sampled.

The resulting data confirmed the presence of many different VOC's and, together with a dangerous flash point in several of the tanks, constituted the need for an immediate action since the UST's were not locked or secured. As a result, the U.S. EPA issued an Administrative Order on Consent (AOC) to the property owner, Mr. Baker, requiring him to dispose of the contents of the tanks, excavate and dispose of the tanks themselves, conduct soil and groundwater sampling, and finally remediate any contamination that was found. The tank excavation and removal were conducted by Baker under the oversight of the U.S. EPA. However, the Extent of Contamination Study and any subsequent final response actions were not completed, due to Mr. Baker's death. At this time, although U.S. EPA suspected that there was a connection between the Accra-Pac site and the VOC contamination that required the water main extension project in the area, that connection had not yet been confirmed. However, analysis of samples taken of material remaining in the UST's confirmed the presence of compounds associated with the aerosol packaging industry.

Sometime after the completion of the alternate water supply project, chemical analyses of water samples from several of the original residential wells showed the presence of compounds associated with the aerosol packaging industry. These wells had been abandoned, but not plugged, upon the residents' connection

to City of Elkhart water. At the time the wells were originally sampled, the samples were not analyzed for specific compounds relating to the Accra-Pac site. The subsequent analyses, showing the presence of chlorofluorocarbons in the former residential wells, combined with the sampling results from the UST's located on the Accra-Pac site, strongly suggested that the Accra-Pac site was one of the sources of the VOC contamination of the groundwater found in the residential wells in the area.

This new information was instrumental in the U.S. EPA's issuance of a Unilateral Administrative Order (UAO) to the estate of Warner Baker and Accra-Pac Inc., requiring them to complete the terms of the original AOC. When the UAO was not complied with, the U.S. Department of Justice filed a civil action against both PRPs (potentially responsible parties) under CERCLA §§ 106 and 107, seeking to require them to complete the above work and also seeking the recovery of funds that the U.S. EPA spent in the effort to connect residences to the City of Elkhart's municipal water supply system.

This action resulted in a Consent Decree being entered by the district judge in which past costs were awarded and the Settling Defendants agreed to conduct on-site response actions. The Consent Decree is structured differently than many RD/RA decrees in which the PRPs agree to implement the remedy (ROD) previously selected by U.S. EPA. In this case, however, since U.S. EPA brought the litigation before the full extent of the site-related contamination was known, it was impossible for the Agency to select a response alternative prior to obtaining this knowledge. Since U.S. EPA had not selected a response action prior to bringing litigation against Accra-Pac and the Estate of Warner Baker, the Consent Decree which requires them to implement the response also allows them to challenge the response action selected. This challenge could have included a mini-trial before the district court judge, who retained jurisdiction of the court action to ensure implementation of the Consent Decree.

Once the Consent Decree was entered, the Settling Defendants submitted a treatability study, which recommended U.S. EPA's adoption of the response action described in this Enforcement Action Memorandum. This recommended action was submitted to the public for public comment; the public comment period was held from September 16, 1996 to October 16, 1996. Only one favorable public comment was received; the response to this comment is contained in the Responsiveness Summary (Attachment I).

III. THREAT TO PUBLIC HEALTH OR THE ENVIRONMENT AND STATUTORY AND REGULATORY AUTHORITIES.

The comprehensive Extent of Contamination Study that was conducted by the PRPs during the legal negotiations in 1990

confirmed the U.S. EPA's worst fears as far as a source of contamination was concerned. The "soup" of VOC contamination extends down into the saturated zone to depths of 70 feet, with the major compounds and their concentrations present in the groundwater indicated in ppb, (parts per billion) as shown here:

1,1-Dichloroethane	3 ppb to 20,300 ppb
1,1-Dichloroethene	17 ppb to 23,800 ppb
tetrachloroethene	22 ppb to 80,000 ppb
trichlorofluoromethane	2 ppb to 66,600 ppb
1,1,2-trichlorofluoromethane	3 ppb to 97,000 ppb
toluene	2 ppb to 52,100 ppb
xylene	2 ppb to 16,800 ppb

The same basic compounds are present in the soils, both in the vadose zone and in the saturated zone, as shown below in mg/kg (milligrams per kilogram):

tetrachloroethene	0.05 mg/kg to 62 mg/kg
1,1,1-trichloroethane	0.05 mg/kg to 12.7 mg/kg
ethyl benzene	0.08 mg/kg to 110 mg/kg
toluene	0.30 mg/kg to 138 mg/kg
xylene	0.08 mg/kg to 425 mg/kg

A. Threats to Public Health or Welfare

As these levels of contamination indicate, the health risks associated with these levels of surface contamination could be considerable. Although the site is in the process of being secured, the two, large open pits, which once housed the two sets of UST's, could serve as an attractive nuisance. VOC contamination via dermal absorption and inhalation could affect any who would climb into the pits.

Although no residence in the path of the plume is known to be using the contaminated aquifer, the possibility remains that an industrial well or an irrigation well could be still in use. In the absence of the treatment system proposed in this Action Memorandum, the path of the plume leads directly to the St. Joseph River and although the river is of considerable size, the VOC contamination will be affecting its quality for a very long time.

Conditions at the Accra-pac Site present an imminent and substantial endangerment to public health and welfare and the environment, based upon factors set forth in the National Contingency Plan (NCP) 40 CFR 300.415 (b)(2). These factors include:

I. Actual or potential exposure to nearby populations, animals, or the food chain from

hazardous substances or pollutants or contaminants;

This factor is present at the Accra-Pac Site due to the presence of large pits which once housed the UST's. If the general population, particularly children, were to play in the sandy pits and disturb the soil, VOC vapors could be inhaled and/or absorbed thru dermal means.

This factor is also present due to the discharge of contaminants from the groundwater into the St. Joseph River; there exists the potential exposure of persons using the river for recreational purposes, and the detrimental effects on water quality, aquatic life, and the food chain.

ii. Actual or potential contamination of drinking water supplies or sensitive ecosystems;

This factor is present at the Accra-Pac Site due to the presence of severely contaminated groundwater. Although it is supposed that no known residences currently use the groundwater, this fact has not been substantiated. There remains the possibility that a future owner of the property or adjacent residential properties might tap into the groundwater for some unknown reason, thus subjecting himself, his employees, or family members to the dangers of the various VOC's.

iii. High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate;

This factor is present at the site as a result of this property being a prime candidate for a future use in the absence of the deed restrictions that will be imposed pursuant to the requirements of the Consent Decree. Absent the actions proposed in this Action Memorandum, if a developer were to remove the concrete foundation and excavate the contaminated soils on the property, he would be subjecting his employees to serious volatile contamination. If the developer removes these soils to some nearby application, this will in fact spread the contaminated soils. In order to re-develop the site, the developer would have to ignore the deed restrictions that will be imposed as a result of the Consent Decree; re-development could also occur if the deed restrictions prove unenforceable against subsequent owners. Because the levels of VOC contamination in soil are so elevated, reliance upon deed restrictions to provide protection of human health, particularly given the restrictions' questionable enforceability, would be highly risky.

Upon review by the On Scene Coordinator of the "Extent of Contamination Study" and the various analytical data contained within, and finding that data consistent with the data he

obtained when the UST's were removed, it is his opinion that the contamination present at the Accra-Pac Site in the soils and in the groundwater, should be considered a source of continuing serious contamination to groundwater and to surface water.

IV. ENDANGERMENT DETERMINATION

Given the location and nature of the Accra-Pac Site, with a clear path of plume movement to the nearby St. Joseph River, and potential exposure pathways of dermal contact, inhalation, and ingestion, as described in Section II. and III. of this Action Memorandum, the actual or threatened release of hazardous substances from the Accra-Pac Site, if not addressed by implementing the response actions described in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

The following alternative, proposed by the Settling Defendants, is recommended for your approval:

Alternative 1. Bioventing/Biosparging followed by Soil Vapor Extraction/ Air Sparging for the contaminated soil; Groundwater Extraction by using Air Stripping Technology and the Re-injection for the contaminated groundwater. Influent to the air stripper would be monitored for contaminant loading and volume, so that emissions from the air stripper would be below regulatory levels.

Soil: Bioventing will be employed first to clean up contaminated soils. With adequate oxygen, moisture, and nutrients, the microorganisms at the site will break down the VOCs in the soil and reduce the toxicity of the remaining contaminants. After bioventing has been employed, soil vapor extraction will be utilized. This sequence of treatments will reduce the concentrations of VOCs in the soil, and extract remaining VOC gases from the soil, reducing total concentrations to safe levels. The Consent Decree contains a cleanup requirement for VOCs of 1 ppm total VOCs; the recommendations of the actions proposed in this Action Memorandum assume that any cleanup standards set forth in the Consent Decree or Scope of Work are fully incorporated into the Action Memorandum.

Ground water: Because the contaminants that were found in shallow ground water are at different concentrations from the contaminants that were found in deeper groundwater, two treatment sequences are being recommended. The recommended treatment for shallow groundwater (groundwater to a depth of 15 feet) is in-situ biosparging, followed by air sparging. The recommended

treatments for deep groundwater are extraction, air stripping, and re-injection.

The use of biosparging will cause air to be introduced into the shallow groundwater, which will provide favorable conditions for microorganisms to digest and break down the contaminants in that portion of the groundwater. Its use will be supplemented by air sparging, which will allow VOCs dissolved in the water to pass off as vapor. Extraction, stripping, and re-injection technologies will complete the treatment of the ground water. The treated ground water will be re-injected, enabling the groundwater extraction system to operate more efficiently.

The Consent Decree requires that the technologies employed will reduce VOC concentrations 95% from their baseline concentration at defined points of compliance. The methodology for determining the points of compliance will be submitted for U.S. EPA review and approval. These cleanup standards shall also be considered to be incorporated into this Action Memorandum once it has been approved.

The Settling Defendants' estimated costs for completing this response action are as follows: capital costs, from $393,000 to $440,000, and annual operation and maintenance costs from $38,000 to $67,000.

Post-removal site control: Appendix C of the Consent Decree, Deed Restrictions, requires the imposition of deed restrictions that prohibit the residential use or further commercial development of the Site. Prohibited uses include grading, excavating, building, construction, or other development that is not approved by U.S. EPA. This Enforcement Action Memorandum specifically re-affirms and incorporates, into this document, the restrictions contained in Appendix C.

Contribution to remedial performance: The Accra-Pac Site has not been listed on the NPL, and, after completion of the response actions set forth in this Enforcement Action Memorandum, NPL listing and/or further remedial actions are very unlikely. If, however, additional actions were determined to be necessary, the actions set forth in this Enforcement Action Memorandum should be fully consistent with any future remedial actions.

U.S. EPA considered two other alternatives for the treatment of contaminated soil and ground water at the Accra-Pac site, which were detailed in the Revised Treatability Study, completed by the Settling Defendants as a requirement of the Consent Decree:

Alternative 2. Low Temperature Thermal Desorbtion for the contaminated soil; Groundwater Extraction by using Air Stripping Technology and Re-injection for the contaminated groundwater.

Costs = Capital Costs: $1,500,000 to $2,100,000.
Annual O & M Costs: $15,000 to $20,000.

Alternative 3. Soil Vapor Extraction/Air Sparging for the contaminated soils; Groundwater extraction by using Air Stripping Technology and Re-injection for the contaminated groundwater.

Costs = Capital Costs: $393,000 to $440,000.
Annual O & M Costs: $45,000 to $67,000.

This Action Memorandum recommends the selection of Alternative 1 as the preferred method of response. This selection was based on three criteria, namely: (1) effectiveness, (2) implementability, and (3) cost.

The recommended alternative is expected to be effective in meeting the cleanup criteria. By using first bioremediation technologies, and later soil vapor extraction and groundwater extraction and air stripping (physical removal technologies), the recommended alternative is expected to treat or remove the multiple contaminants present at the Accra-Pac site. Similarly, Alternative 2, Low Temperature Thermal Desorption (LTTD) can be a very effective treatment technology for the contaminants associated with the site. By utilizing large earth-moving equipment and the large thermal desorper, the same basic results as those recommended in this Action Memorandum can be achieved. Although all three Alternatives will effectively clean the contaminated soil and groundwater, the higher Capital Costs associated with Alternative 2 eliminated it from consideration.

The only difference between the recommended alternative and Alternative 3 is that Alternative 3 would not utilize bio-venting, air sparging and biosparging. While both the EPA-recommended alternative and Alternative 3 are equally effective, Alternative 3 probably would successfully achieve site cleanup standards more quickly than the alternative recommended in this Action Memorandum. However, these time savings would be offset by the greatly increased production of contaminated vapors from the site, increasing the need for control technology and the associated cost (especially, capital cost) of the response action.

ARARs Compliance--The following statutes and regulations have been identified as applicable or relevant and appropriate federal and state environmental laws and regulations: The federal and state Clean Water Acts, Safe Drinking Water Acts, and implementing regulations, the federal and state Clean Air Acts and implementing regulations, and the federal and state versions of the Resource Conservation and Recovery Acts (RCRA)--hazardous waste treatment, storage and disposal--and their implementing regulations.

U.S. EPA has determined that all of the proposed alternatives will meet the implementing regulations of the Safe Drinking Water Act, particularly the Maximum Contaminant Levels (MCLs), to the extent practicable. MCLs define the maximum levels for particular contaminants which can be present in groundwater which is or could be used as a drinking water source. In U.S. EPA's judgment, all of the proposed groundwater alternatives will come very close to meeting MCLs, but even after the response action, there may be some contaminants left in the groundwater at levels above MCLs. However, since the 1985 U.S. EPA response action, municipal water is currently available to all property owners who could be affected by the ground-water contaminants originating at the site.

All of the alternatives considered at this site for ground-water response include ground-water extraction, air stripping, and re-injection. The air stripping technology has the potential for releasing VOCs into the air. When the release of VOCs would be greater than levels defined in federal or state regulations, control technology must be installed in order to treat, capture or limit these emissions.

During the course of litigating and negotiating the issue of whether control technology would be required at this Site, U.S. EPA and the Settling Defendants identified two different sets of regulations which potentially define the maximum amounts of VOCs that can be emitted before control technology can be required. One of these limits is contained in federal regulations implementing RCRA, 40 C.F.R. Part 264 Subpart AA, which states that only 3.1 tons of VOCs can be emitted by an air stripper without control technology. The other potential limit is contained in the Indiana State Implementation Plan under the state version of Clean Air Act, which, once approved by U.S. EPA, also becomes federally enforceable under the federal Clean Air Act; these regulations state that 25 tons of VOCs per year can be emitted before there is a need to install control technology. The Settling Defendants argue that the state air regulations apply; it is the position of U.S. EPA that the federal RCRA regulations are more appropriate.

The Settling Defendants have submitted data to U.S. EPA that suggests that the largest potential source of the VOC emissions, the petroleum hydrocarbons contained in the soil, will remain in the soil and will not be released into the air, as a result of the operation of the groundwater treatment system. This data is present in the administrative record.

This Action Memorandum, thus, determines that air emissions control technology is not required for this response action at this time. This determination is predicated on the requirement that the Settling Defendants submit a final design for the system, as part of the Engineering Design Study Plan, that would

enable the system to use a series of operational controls to comply with the RCRA air emission discharge limits contained at 40 C.F.R. Part 264, Subpart AA. The operational controls anticipated to be utilized by the Settling Defendants include, but are not limited to, adjusting the pumping ratio of the groundwater extraction system, controlling the influent concentration by varying the pumping rates between the different extraction wells, and by strictly controlling the actual hours of operation of the system as a last resort, so that the emission rate remains below the RCRA limit. The use of any operational/ engineering controls will be subject to approval by U.S. EPA.

If, at some time in the future, the Settling Defendants were not able to operate the groundwater treatment system consistent with the RCRA limits, U.S. EPA could re-visit its prior determination, contained in this Action Memorandum, that air emissions control technology is not required at this site. In the event this occurs, the Settling Defendants would cease operating the groundwater treatment system, while the parties asked the federal district court judge, pursuant to the dispute resolution provisions of the Consent Decree, to decide whether the state air regulations or federal RCRA limits apply. At no time would the public be exposed to VOC emissions above the federal limits, unless the judge determined that the state air limits, and not the federal RCRA ones, were applicable. If the judge decided that the state limits were applicable, the Settling Defendants are confident that their system would always operate below the state limits, without control technology. The plan also requires the Settling Defendants to institute monitoring of the contaminant influent to the air stripper in order to calculate that emissions from the system are in compliance with whichever limit is determined to be applicable or relevant and appropriate.

It should also be noted that, to the extent that hydrocarbons are contained in the soil, and are also not treatable by the soil treatment technologies, this Action Memorandum requires the Settling Defendants to dig up and properly dispose of the hydrocarbon-contaminated soil, or to otherwise demonstrate to U.S. EPA that residual soil contamination levels do not present an inordinate risk to human health or the environment. The decision to waive or modify the cleanup standards set in this Action Memorandum and/or the Consent Decree is at the sole discretion of U.S. EPA.

In a letter dated February 14, 1995 from the Indiana Department of Environmental Management, which indicated the State's approval of any of the Alternatives presented in the Revised Treatability Study, the State asserted that re-injection of the groundwater might require an NPDES permit. However, a January 28, 1997 letter from the Settling Defendants' consultant, H. Stephen Nye, P.E., of EIS Environmental Engineers, Inc. states that the re-injection system would act as a closed loop system, and that the down-

gradient wells would capture the contaminated groundwater. For this reason, once the re-injection system is operational, there is not expected to be discharge of site-related contamination to the St. Joseph River. Thus, it is U.S. EPA's determination that Indiana's NPDES regulations are not ARARs for the proposed Removal Action.

The wells used to re-inject groundwater are subject to certain regulations under the underground injection controls (UIC) program, specifically 40 C.F.R. §§ 144.13 (prohibition of Class IV wells, with exceptions made for groundwater treatment under CERCLA), 144.26 (inventory requirements)and 144.23 (closure requirements).

Prior to commencing work on the EPA selected Alternative, the following documents will have to be submitted by the Settling Defendants and approved by the U.S. EPA:

1. Site health and Safety Plan

2. Establishing the Site "Base Line" Concentrations for both the soil and the groundwater.

3. Preliminary design Specification.

4. Final Design Specifications.

Post-removal site control, consistent with the provisions of Section 300.415 (k) of the NCP, will be instituted through the impositions of deed restrictions, Appendix C of the Consent Decree, on the Accra-Pac property.

The response actions described in this memorandum directly address actual or threatened releases of hazardous substances, pollutants or contaminants at the Site which may pose an imminent and substantial endangerment to public health and safety, and to the environment. These response actions do not impose a burden on the affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

All applicable or relevant requirements (ARARS) of Federal law will be complied with to the extent practicable. A letter was sent to the Indiana Department of Environmental Management (IDEM) requesting a timely identification of ARAR's. In accordance with the revised NCP, Section 300.825 (a)(1), the response from the State to the request for ARAR's has been added to the

administrative record for this site. The State of Indiana will be copied on all submittals and will be kept informed as to the project's progress.

VI. CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED

The failure to act or delay in action will result in the continued release of contaminants into the St. Joseph River for many, many years. The "Extent of Contamination Study," completed by the Responsible Parties, has shown that the plume of contamination has reached the River and with the very severe nature of the contamination found at the Site, the contaminant loading to the river would continue unabated for several lifetimes.

In addition, the risk from inhalation or dermal contact if the property is developed in the future is real. In fact, if the aquifer is for some reason utilized by a party living down-gradient from the site (i.e. irrigation or process water), that water will be contaminated and the parties using it will be at risk.

To this date, neither the State of Indiana nor the local County or City government have shown an ability to respond expeditiously to the site.

VII. OUTSTANDING POLICY ISSUES

None

VII. ENFORCEMENT

For administrative purposes, information concerning confidential enforcement strategy for this site is contained in the Enforcement Confidential Addendum.

IX. RECOMMENDATION

This decision document represents the selected removal action for the Accra-Pac Site, in Elkhart, Indiana, developed in accordance with CERCLA, as amended, and is not inconsistent with the NCP. I can recommend your approval of the proposed removal action. This decision is based upon the Administrative Record for this site. Conditions at the Site meet the NCP Section 300.415(b)(2) criteria for a removal action.

APPROVE: Thomas V. Skinner

for William E. Muno, Director
Superfund Division

Attachments:

1. Responsiveness Summary
2. Enforcement Confidential Addendum
3. Administrative Record Index

ATTACHMENT I

RESPONSIVENESS SUMMARY

Only one comment was submitted during the public comment period, by the Elkhart County Department of Health. The comment supported the response actions recommended in the Proposed Plan.

U.S. EPA thanks the commentor for its comment.

ATTACHMENT II.

ENFORCEMENT CONFIDENTIAL ADDENDUM

Most of the issues that arose in the litigation regarding this Site were resolved in the Consent Decree and the associated Scope of Work that were entered by the Court in that litigation. The Consent Decree did reserve to the Settling Defendants the ability to challenge, through the dispute resolution process set forth in the Decree, U.S. EPA's selection of the response action at the Site. Since, however, the Action Memorandum recommends the selection of the response action preferred by the Settling Defendants, challenges to the Response Action are not anticipated.

The only remaining issue that could surface during the operation of the pump and treat system is the on-going disagreement between the parties as to which regulation limits the amount of VOC emissions from the air stripper. As set forth in the body of the Action Memorandum, the Settling Defendants essentially contend that U.S. EPA is not entitled to consider the RCRA regulations, which we consider relevant and appropriate, if there is another, state regulation, such as the Indiana air regulations, which are applicable. U.S. EPA is unaware of any case law which would support the Settling Defendants' contentions, and CERCLA § 121(d) certainly indicates that the most stringent federal or state standard should be considered the ARAR, and it does not matter whether the standard is applicable or relevant and appropriate.

In any event, this issue is really not expected to arise since it is anticipated that the Settling Defendants can institute engineering controls, such as adjusting the pumping ratio of the groundwater extraction system, controlling the influent concentration by varying the pumping rates between the different extraction wells, and by strictly controlling the actual hours of operation of the system as a last resort, so that the emission rate remains below the RCRA limit. It is also important to note that while contaminant levels in the groundwater are such that the RCRA air process regulations are considered relevant and appropriate, the levels are just at the regulations' threshold. For this reason, the Site team is reasonably confident that this potential issue will not actually manifest itself during the extraction system's operation.

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U.S. EPA ADMINISTRATIVE RECORD
REMOVAL ACTION
ACCRA PAC SITE
ELKHART, INDIANA
UPDATE #4
03/19/97

DOC#	DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
1	12/12/91	Bates, J., IDEM/Office of Air Management	Schroer, D., IDEM/OER	Memorandum re: (1) OAM s Review of the September 1990 "Report of the Investigation of Contamination at the Warner P. Baker/Accra Pac Site" and (2) Forwarding Attached Construction Permit Application	18
2	12/19/91	Hall, C., U.S. EPA/Air Toxics and Radiation Branch	Estes, S., U.S. EPA	Memorandum re: ATRB s Comments on the "Report of the Investigation of Contamination at the Warner P. Baker/Accra Pac Site"	3
3	09/14/94	Rodino, S./Accra Pac, Inc.	Estes, S., U.S. EPA	Letter (1) Forwarding Accra Pac's Treatability Study and (2) Discussion of ARARs Issue	2
4	02/14/95	Giles, B., IDEM	Theisen, K., U.S. EPA	Letter re: IDEM's Comments on the Treatability Study Report's Proposed Alternatives for Remediation of Soil and Groundwater Contamination at the Accra Pac Site	1
5	09/25/96	Hulewicz, J. and R. Watkins; Elkhart County Health Dept.	Novak, D., U.S. EPA/OPA	Letter re: ECHD's Comments on the Proposed Plan for the Accra Pac Site	1
6	10/18/96	VanRheenen, R.; VanRheenen & Associates	Estes, S., U.S. EPA	Letter re: Applicability of RCRA Air Emissions Standard at the Accra Pac Site	2
7	10/31/96	Accra Pac Group/ EIS Environmental Engineers, Inc.	U.S. EPA	Baseline Groundwater Monitoring Report (September 1996) w/Attached Document Submission Distribution List	42
8	03/18/97	Theisen, K., U.S. EPA	Muno, W., U.S. EPA	Enforcement Action Memorandum: Request for a Non-Time Critical CERCLA Removal Action at the Accra Pac Site	26

UPDATE #3 GUIDANCE ADDENDUM
ACCRA PAC SITE
DOCUMENTS MAY BE VIEWED AT
U.S. EPA REGION 5
77 W. JACKSON BLVD.; CHICAGO, IL 60604-3590
08/30/96

DOC#	DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
1	00/00/83	Pacific Northwest Laboratory; et al.	U.S. EPA	EPA Guide for Identifying Cleanup Alternatives at Hazardous Waste Sites and Spills: Biological Treatment [Final] *(EPA-600/3-83-063)*	120
2	08/01/84	U.S. EPA/Office of Ground Water Protection	U.S. EPA	Ground Water Protection Strategy [Final] (EPA/440/6-84-002)	65
3	09/01/84	U.S. EPA/OSWER/OERR	U.S. EPA	Health Effects Assessment Documents 958 Chemical Profiles [Final] (EPA/540/1-86/001-058)	1750
4	09/01/85	Barcelona, M., et al.; Illinois State Water Survey	U.S. EPA	Practical Guide for Ground Water Sampling [Final] (EPA/600/2-85/104)	175
5	09/27/85	Clement Associates, Inc.	U.S. EPA	Chemical, Physical & Biological Properties of Compounds Present at Hazardous Waste Sites [Final] (OSWER Directive 9850.3)	320
6	10/02/85	U.S. EPA/OSWER	U.S. EPA	CERCLA Compliance with Other Environmental Statutes [Final] (OSWER Directive 9234.0-2)	19
7	11/22/85	U.S. EPA/OSWER	U.S. EPA	Endangerment Assessment Guidance [Final] (OSWER Directive 9850.0-1)	11
8	12/01/86	U.S. EPA/Office of Ground Water Protection	U.S. EPA	Guidelines for Ground Water Classification Under the EPA Ground Water Protection Strategy [Draft]	600
9	03/01/87	U.S. EPA/OERR/OWPE	U.S. EPA	Data Quality Objectives for Remedial Response Activities Example Scenario: RI/FS Activities at a Site w/Contaminated Soils and Groundwater [Final] (OSWER Directive 9355.0-7B)	120
10	04/13/87	U.S. EPA/OERR/ERD	U.S. EPA	Environmental Review Requirements for Removal Actions [Final] (OSWER Directive 9318.0-05)	6
11	04/21/87	U.S. EPA/OERR	U.S. EPA	The Role of Expedited Response Actions Under SARA [Final] (OSWER Directive 9360.0-15)	3
12	10/06/87	U.S. EPA/OSWER/OERR	U.S. EPA	Interim Final Guidance on Removal Action Levels at Contaminated Drinking Water Sites (OSWER Directive 9360.1-01)	9

DOC#	DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
13	02/01/88	U.S. EPA/OSWER/OERR	U.S. EPA	Superfund Removal Procedures (Revision #3) [Final] (OSWER Directive 9360.0-03B)	365
14	04/01/88	U.S. EPA/OERR	U.S. EPA	Superfund Exposure Assessment Manual [Final] (OSWER Directive 9285.5-1)	160
15	04/19/88	U.S. EPA/OSWER/ERD	U.S. EPA	Information on Drinking Water Action Levels [Final]	17
16	05/16/88	U.S. EPA/OSWER	U.S. EPA	Interim Guidance on Potentially Responsible Party Participation in Remedial Investigations and Feasibility Studies [Final] (OSWER Directive 9835.1a)	37
17	08/08/88	U.S. EPA/OERR	U.S. EPA	CERCLA Compliance with Other Laws Manual [Draft] (OSWER Directive 9234.1-01)	245
18	02/07/89	U.S. EPA/OSWER	U.S. EPA	Revisions to the Interim Guidance on PRP Participation in Remedial Investigations and Feasibility Studies (OSWER Directive 9835.2A)	30
19	09/26/90	U.S. EPA/OSWER	U.S. EPA	Transmittal of Superfund Removal Procedures Manual—Action Memorandum Guidance (OSWER Directive 9360.3-01)	65
20	08/06/93	U.S. EPA/OSWER	U.S. EPA	Transmittal of Guidance on Conducting Non Time Critical Removal Actions Under CERCLA (OERR Directive 9360.0-32)	68

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DOC#	DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
1	09/09/93	Bio-Rea, Inc.	U.S. EPA	Treatability Study, Health and Safety Plan, and Quality Assurance Project Plan	II
2	12/13/93	U.S. EPA		Comments on the Biological Treatment Study Report	7
3	01/20/94	EIS Environmental Engineers, Inc.	U.S. EPA	Laboratory Analysis Reports: Groundwater Samples	87
4	02/11/94	Bio-Rea, Inc.	U.S. EPA	Biological Treatment Study Report	399
5	03/10/94	Wingard, J., EIS Environmental Engineers, Inc.	Theisen, K., U.S. EPA	Letter Forwarding Attached EIS Laboratory Analytical Reports re: Monitoring Well Groundwater Samples and MCR Study Soil Samples	76
6	03/17/94	Theisen, K., U.S. EPA	Russell, H., U.S. EPA	Memorandum re: Accra-Pac Facts	1
7	09/00/94	Nye, E., EIS Environmental Engineers, Inc.	Theisen, K., U.S. EPA	Treatability Study Report w/Attached September 14, 1994 Cover Letter	365

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FOR
ACCRA PAC, INC. SITE
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UPDATE #1
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PAGES	DATE	TITLE	AUTHOR	RECIPIENT	CATEGORY	DOCUMENT TYPE	DOCUMENT NUMBER
905	09/00/90	Report of the Investigation of Contamination at the Warner P. Baker/Accra Pac Site	Various EIS Environmental Engineers, Inc.	Warner Baker Estate, Accra Pac, Inc.	Other Information	Report	06 0004

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4	00/00/00	PHYSICAL CHARACTERISTICS OF UNDERGROUND TANK LIQUIDS.	UNKNOWN UNKNOWN	UNKNOWN ELKHART CO. HEALTH DEPT.	FACTUAL INFORMATION OR DATA	ANALYTICAL DATA	01 0001
7	00/00/00	SAMPLING ANALYSIS FROM A-1 LAB.	UNKNOWN ROY F. WESTON, INC.	UNKNOWN UNKNOWN	FACTUAL INFORMATION OR DATA	ANALYTICAL DATA	01 0005
50	02/07/90	TECHNICAL ASSISTANCE TEAM REPORT FOR POTENTIALLY RESPONSIBLE PARTY MONITORING.	BINKLEY, J., DOYLE, W. ROY F. WESTON, INC.	HEATON, D. U.S. EPA	FACTUAL INFORMATION OR DATA	ANALYTICAL DATA	01 0012
11	06/06/89	ANALYTICAL REPORTS FOR SAMPLES TAKEN FROM THE SITE ON 5/23/89 WITH TRANSMITTAL LETTER.	VARIOUS WESTON-GULF COAST LABORATORIES	MATZ, S. ROY F. WESTON, INC.	FACTUAL INFORMATION OR DATA	ANALYTICAL REPORT	01 0062
33	04/27/89	ANALYTICAL RESULTS FOR SAMPLES TAKEN FROM THE SITE ON 4/11/89 AND 4/12/89 WITH TRANSMITTAL LETTER.	VARIOUS WESTON-GULF COAST LABORATORIES	MATZ, S. ROY F. WESTON, INC.	FACTUAL INFORMATION OR DATA	ANALYTICAL REPORT	01 0073
1	12/15/88 EST	LETTER PROVIDING RESULTS OF THE ANALYSIS OF WATER SAMPLES TAKEN FROM A MONITOR WELL NEAR THE SITE ON 1/5/87.	THEISEN, K. U.S. EPA	PAYNE, R. MIDIK PACKAGING CORP.	FACTUAL INFORMATION OR DATA	CORRESPONDENCE	01 0106
7	01/07/88	A SUMMARY OF THE GROUND-PENETRATING RADAR (GPR) SURVEY CONDUCTED BY EPA AT THE SITE ON 10/22/87.	VENDL, M. U.S. EPA	VENDL, K. U.S. EPA	FACTUAL INFORMATION OR DATA	REPORT	01 0107

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154	06/25/87	TAT REPORT OF REMOVAL PROCEDURES UNDERTAKEN AT THE SITE BY THE PRPS WITH ATTACHMENTS.	FITZPATRICK, R., MATZ, S. ROY F. WESTON, INC.	STRIMBU, M. U.S. EPA	FACTUAL INFORMATION OR DATA	REPORT	01 0114
10	01/20/87	WATER SAMPLE IDENTIFICATION SHEETS AND ORGANIC ANALYSIS REPORTS FOR SAMPLES TAKEN ON 9/22/86.	UNKNOWN UNKNOWN	UNKNOWN UNKNOWN	FACTUAL INFORMATION OR DATA	ANALYTICAL DATA	01 0268
14	01/15/87	ORGANIC ANALYSIS OF WATER SAMPLES.	UNKNOWN GULF COAST LABORATORIES	UNKNOWN UNKNOWN	FACTUAL INFORMATION OR DATA	ANALYTICAL DATA	01 0278
2	01/02/87	ANALYTICAL RESULTS OF SOIL SAMPLES TAKEN DURING PRP REMOVAL ACTIONS.	UNKNOWN ROY F. WESTON, INC.	UNKNOWN UNKNOWN	FACTUAL INFORMATION OR DATA	ANALYTICAL DATA	01 0292
49	01/00/86	EMERGENCY ACTION PLAN.	TECHNICAL ASSISTANCE TEAM ROY F. WESTON, INC.	UNKNOWN U.S. EPA	FACTUAL INFORMATION OR DATA	PLAN	01 0294
2	08/28/85	VOC ANALYSIS, TABLE 2.	UNKNOWN UNKNOWN	UNKNOWN UNKNOWN	FACTUAL INFORMATION OR DATA	ANALYTICAL DATA	01 0343
4	08/26/85	INVESTIGATION REPORT FORM WITH INFORMATION ON THE EXCAVATION OF ABANDONED UNDERGROUND TANKS AT THE SITE.	BROWN, R., MICHAEL, M. ELKHART CO. HEALTH DEPT.	UNKNOWN UNKNOWN	FACTUAL INFORMATION OR DATA	REPORT	01 0345
24	05/22/85	WATER SAMPLE REQUEST FORMS FOR CHEMICAL EXAMINATION OF WATER SAMPLES COLLECTED FROM RESIDENTIAL AND BUSINESS WELLS ON 3/6/85 AND 5/17/85.	BROWN, R., MICHAEL, M. ELKHART CO. HEALTH DEPT.	BROWN, R.T. GULF COAST LABORATORIES	FACTUAL INFORMATION OR DATA	ANALYTICAL DATA	01 0349

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6	05/17/85	PHASE I AND II REPORT - ELKHART, SUPERIOR ST. AREA HYDROLOGIC ASSESSMENT.	VENDL, K. U.S. EPA	UNKNOWN UNKNOWN	FACTUAL INFORMATION OR DATA	REPORT	01 0373
32	01/00/90	COMMUNITY RELATIONS PLAN FOR ACCRA PAC SITE.	TECHNICAL ASSISTANCE TEAM ROY F. WESTON, INC.	UNKNOWN U.S. EPA	PUBLIC PARTICIPATION	PLAN	03 0001
3	08/22/89	MEMO REPORTING ON 8/16/89 TRIP TO MAIN STREET WELL FIELD AND THE ACCRA PAC SITE.	GASIOR, A. U.S. EPA	GRAND, J., LESSER, T. UNKNOWN	PUBLIC PARTICIPATION	CORRESPONDENCE	03 0033
1	08/00/89	(FORMER) ACCRA PAC CLEANUP CONTINUES.	UNKNOWN U.S. EPA	UNKNOWN UNKNOWN	PUBLIC PARTICIPATION	FACT SHEET	03 0036
2	04/26/88	NEWSPAPER CLIPPING REGARDING ACCRA PAC SITE WITH TRANSMITTAL LETTER.	RODINO, S. ATTORNEY AT LAW	UNKNOWN U.S. EPA	PUBLIC PARTICIPATION	NEWSPAPER OR MAGAZINE ARTICLE	03 0037
1	04/14/88	EPA ORDERS CLEANUP AT ACCRA PAC, ELKHART,IN.	GASIOR, A. U.S. EPA	UNKNOWN UNKNOWN	PUBLIC PARTICIPATION	NEWS RELEASE	03 0039
3	07/16/87	MEMO TO FILE PROVIDING REPORT ON 6/29/87 MEETING REGARDING THE STATUS OF THE SITE AND FUTURE ACTIVITIES.	VENDL, K. U.S. EPA	FILE U.S. EPA	PUBLIC PARTICIPATION	CORRESPONDENCE	03 0040
2	04/00/87 EST	U.S. EPA INVESTIGATION IDENTIFIES CONTAMINATION.	GASIOR, A. U.S. EPA	UNKNOWN UNKNOWN	PUBLIC PARTICIPATION	FACT SHEET	03 0043

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1	01/08/87	A INSPECTOR LINKS ACCRA PAC SITE TO CONTAMINATED WELLS.	HOWEY, B. THE ELKHART TRUTH	UNKNOWN UNKNOWN	PUBLIC PARTICIPATION	NEWSPAPER OR MAGAZINE ARTICLE	03 0045
1	01/07/87	FORMER ACCRA PAC SITE TESTED.	WATKINS-PIERCE, T. THE ELKHART TRUTH	UNKNOWN UNKNOWN	PUBLIC PARTICIPATION	NEWSPAPER OR MAGAZINE ARTICLE	03 0046
2	08/12/86	EPA ORDERS CLEANUP AT ACCRA PAC SITE.	GASIOR, A. U.S. EPA	UNKNOWN UNKNOWN	PUBLIC PARTICIPATION	NEWS RELEASE	03 0047
3	07/13/76	LETTER REQUESTING INFORMAL MEETING TO DISCUSS POSSIBLE CONTAMINATION OF LOCAL GROUND WATER BY ACCRA PAC, INC.	STEVENS, P. INDIANA STATE BOARD OF HEALTH	SHAH, S. ACCRA PAC, INC.	OTHER INFORMATION	CORRESPONDENCE	06 0001

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DOCUMENT NUMBER	COMMENTS
01 0005	HANDWRITTEN; DOCUMENT NOTED AS "VERBALS FROM A-1 LABS".
01 0012	ATTACHMENT A (SITE PHOTOGRAPHS) IS MISSING. ONLY ATTACHMENT B (WEEKLY OSC STATUS REPORT) IS INCLUDED.
01 0107	INCLUDES ATTACHED DIAGRAMS.
01 0114	INCLUDES ATTACHMENT A (HAZARDOUS WASTE MANIFESTS) AND ATTACHMENT B (ANALYTICAL DATA).
01 0278	DATE DETERMINED FROM PAGE 01 0282.
01 0292	INCLUDES ATTACHED CHAIN OF CUSTODY RECORDS. DATE DETERMINED FROM PAGE 01 0292. 01 0293 IS BEST AVAILABLE COPY.
01 0294	PLAN INCLUDES ATTACHMENTS A, B AND C. PAGE 01 0325 IS BEST AVAILABLE COPY.
01 0345	INCLUDES GROUND WATER CONTAMINATION FIELD SURVEY SHEET AND 6/14/85 SAMPLING REPORT.
01 0349	INDIANA STATE BOARD OF HEALTH FORMS FILLED OUT BY ELKHART CO. HEALTH DEPT.
01 0373	INCLUDES MAPS AND SAMPLE RESULTS. DATE DETERMINED FROM PAGE 01 0378.
03 0001	INCLUDES LISTS OF CONTACTS, INTERESTED PARTIES, AND MAILING LISTS.
03 0033	INCLUDES HANDWRITTEN SIGN-IN SHEET FOR BOTH SITES. AUTHOR ORGANIZATION DETERMINED FROM OTHER DOCUMENTS IN INDEX.
03 0036	THIS FACT SHEET IS INCOMPLETE.
03 0039	THIS NEWS RELEASE IS INCOMPLETE.
03 0040	INCLUDES HANDWRITTEN LIST OF ATTENDEES.
06 0001	INCLUDES DIAGRAM AND HANDWRITTEN NOTES ON CAPACITY AND CONTENTS OF TANKS.

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DOCUMENT NUMBER	COMMENTS
06 0004	THIS ENTRY IS AN UPDATE TO THE INDEX. THIS REPORT CONTAINS FOUR VOLUMES.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

March 21, 1997

John R. Wingard, P.E.
Director of Environmental Affairs
The Accra Pac Group, Inc.
2730 Middlebury Road
P.O. 878
Elkhart, IN 46515

David L. Mirkin
Mirkin, Tuesley & Mirkin
Suite 400, Norwest Bank Bldg.
112 W. Jefferson Blvd.
South Bend, IN 46601

Re: U.S. v. Accra Pac and Estate of Warner Baker

Dear Messrs. Wingard and Mirkin:

Enclosed, please find a copy of the Enforcement Action Memorandum which was signed by the Acting Director of the Superfund Division, Region V, U.S. EPA on March 18, 1997. This document, which accepted Accra Pac's preferred response action for the site, constitutes U.S. EPA's decision document for the Accra Pac site.

Since this document has been finalized, we must now establish an schedule, enforcable under the terms of the Consent Decree and the Scope of Work, for design submittals and construction of the response action. I know that you have authorized your contractor, Stephen Nye, to develop this schedule. I would like this schedule to be submitted by Friday, April 4, 1997. Once I have reviewed and approved Mr. Nye's schedule, all of the attorneys involved will need to correlate the schedule with provisions of the Consent Decree and Scope of Work.

Please contact me at (312) 886-1959 if you have any questions regarding the Enforcement Action Memorandum, scheduling issues, or this letter.

Sincerely,

Kenneth M. Theisen

Kenneth M. Theisen
On-Scene Coordinator

cc: Richard S. VanRheenen
Samuel J. Rodino